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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,093	01/16/2004	Shih-Lin Lee	MR2723-347	5268
4586	7590	09/16/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			COHEN, AMY R	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 09/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,093

Applicant(s)

LEE, SHIH-LIN

Examiner

Amy R Cohen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 2, 9, 10, 11 are objected to because of the following informalities:

Claim 2, lines 1-2 claim language “wherein a number of said trigger block of said controlling element is more than one” is confusing since it appears to have grammatical errors and since only one trigger block is claimed in claim 1.

Claim 9, line 3 “vice versa” in claim 9 is confusing since only one combination should be positively claimed in each claim. Examiner contends that either combination will meet this limitation.

Claim 10, line 2 “a groove mounted at two sides” claim language is confusing; it appears that the claim should read that there is a groove in each side or a groove on one side.

Claim 11, line 2 “a sliding trough mounted at two sides” claim language is confusing; it appears that the claim should read that there is a sliding trough in each side or a sliding trough on one side.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1, 6, 7, 9, 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (U. S. Patent No. 6,763,598).

Chen teaches a refined laser leveler, comprising: a fixed base (1) having a laser transmitter (3) and two conducting pieces mounted at a front end thereof and a power supplier mounted thereon for supplying power (the laser device is electronic therefore, it would have conducting pieces mounted thereon to conduct power to the laser from the power supply, even though this is not specifically stated); a controlling element (5) mounted at a front edge of said conducting pieces and having a protruded block mounted at a back end thereof, a trigger block mounted at a front end thereof (Col 2, lines 42-67), a hole (52) and a beam splitter (52) mounted thereon, wherein said beam splitter comprises a vertical grating and a horizontal grating (Col 2, lines 42-67); and a case (1) for covering said fixed base and said controlling element and having an opening located at a position corresponding to said controlling element for sliding said controlling element in said opening (Figs. 1-5); thereby different types of checking beams including a spot beam, a vertical beam and a cross beam are respectively produced through a three-section control of a slide of said controlling element (Col 2, lines 22-67).

Chen teaches the refined laser leveler, wherein said fixed base comprises at least a level bubble calibrator (2) mounted at a top end thereof, wherein said at least a level bubble calibrator is two perpendicular level bubble calibrators mounted (Fig. 2).

Chen teaches the refined laser leveler, wherein said vertical grating is mounted at an upper half of said light splitter and said horizontal grating is mounted at a lower half of said light splitter, and vice versa (Figs. 1-5).

Chen teaches the refined laser leveler, wherein said controlling element further comprises a groove (groove us formed in element 4, Figs 1-5) mounted at two sides thereof for positioning thereof.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rando (U. S. Patent No. 6,005,719) [hereinafter Rando '719] in view of Rando (U. S. Patent No. 6,009,630) [hereinafter Rando '630].

Rando '719 discloses a refined laser leveler, comprising: a fixed base (100) having a laser transmitter (102) and two conducting pieces mounted therein (the laser device is electronic therefore, it would have conducting pieces mounted thereon to conduct power to the laser from the power supply, even though this is not specifically stated) and a power supply mounted thereon for supplying power (the laser device is electronic therefore, it would have a power supply, even though this is not specifically stated); a controlling element (110) mounted at a front edge and having a protruding block mounted at a back end thereof (Fig. 15), a trigger block (112) mounted at a front end thereof, a hole (105) and a beam splitter (106, 108) mounted thereon, wherein said beam splitter comprises a vertical grating and a horizontal grating (Col 6, lines 7-53); and a case (100) for covering said fixed base and said controlling element and having

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an opening located at a position corresponding to said controlling element for sliding said controlling element in said opening (Fig. 15 and Col 6, lines 7-53); thereby different types of checking beams including a spot beam, a vertical beam and a cross beam are respectively produced through a three-section control of a slide of said controlling element (Figs. 15-17 and Col 6, lines 7-53).

Rando '719 discloses the refined laser leveler wherein said vertical grating is mounted at an upper half of said light splitter and said horizontal grating is mounted at a lower half of said light splitter, and vice versa (Col 6, lines 7-53).

Rando '719 discloses the refined laser level wherein said controlling element further comprises a groove mounted at two sides thereof for positioning thereof (groove is considered to be on each side of extending level 112 on controlling element 110, Fig. 15).

Rando '719 does not disclose a refined laser leveler comprising more than one trigger block; wherein said controlling element is mounted at a front edge of said conducting pieces; wherein said fixed base comprises at least a level bubble calibrator mounted at a top end thereof; wherein said at least a level bubble calibrator is two perpendicular level bubble calibrators mounted thereon; wherein said power supplier is a battery and mounted at a back end of said conducting piece for supplying power.

Rando '630 discloses a refined laser leveler (16) comprising more than one trigger block (A, B, C); wherein said controlling element (24) is mounted at a front edge of said conducting pieces and having a protruding block (Figs. 11A and 11B); wherein said fixed base comprises at least a level bubble (4) calibrator mounted at a top end thereof; wherein said at least a level bubble calibrator is two perpendicular level bubble calibrators (4, 25) mounted thereon; wherein

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said power supplier is a battery and mounted at a back end of said conducting piece for supplying power (Figs. 4-6, 11A, 11B, Col 3, line 43-Col 4, line 7, and Col 5, lines 18-50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the refined laser leveler of Rando '719, to have the power supply connected to the controlling element and to have bubble levels, as taught by Rando '630, so that the power supply would be directly connected to the beam splitter, reducing the number of switches on the device, and so that a user could visually see if the refined laser leveler were level on a surface.

6. Claims 1, 4-6, 8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bijawat et al. (U. S. Patent No. 6,360,446) in view of Hara et al. (U. S. Patent No. 5,838,431).

Bijawat et al. discloses a refined laser leveler (10), comprising: a fixed base (26) having a laser transmitter (130) and two conducting pieces mounted at a front end thereof (Fig. 10) and a power supplier (33) mounted thereon for supplying power; a controlling element (160, 180) mounted at a front edge of said conducting pieces and having a protruding block mounted at a back end thereof (Figs. 9A, 9B), a trigger block mounted at a front end thereof (Figs. 9A, 9B), a hole (46) and a beam splitter (160) mounted thereon; and a case (20) for covering said fixed base and said controlling element and having an opening located at a position corresponding to said controlling element for sliding said controlling element in said opening (Figs. 1-3, 7, and 9A, 9B); thereby different types of checking beams including a spot beam and a cross beam are respectively produced through a two-section control of a slide of said controlling element (Col 7, lines 1-43).

Bijawat et al. discloses the refined laser leveler wherein said fixed base further comprises a magnetic object mounted at a bottom surface thereof for being attracted on a platform (Col 3, lines 62-65); wherein said magnetic object is a magnet (28).

Bijawat et al. discloses the refined laser leveler wherein said fixed base comprises at least a level bubble calibrator (82) mounted at a top end thereof.

Bijawat et al. discloses the refined laser leveler wherein said power supplier is a battery (33) and mounted at a back end of said conducting piece for supplying power (Col 3, line 30-Col 4, line 3).

Bijawat et al. discloses the refined laser leveler wherein said case comprises a sliding trough (Figs. 9A, 9B) mounted at two sides thereof and plural wedging blocks (166, 168) mounted in said sliding trough so that said controlling element is positioned through a cooperation between said controlling element and said plural wedging blocks (Col 6, line 56-Col 7, line 24).

Bijawat et al. does not disclose a refined laser leveler wherein the beam splitter comprises a vertical grating and a horizontal grating, thereby producing an additional vertical beam and a three-section control on the controlling element.

Hara et al. discloses a refined laser leveler wherein the beam splitter comprises a vertical grating and a horizontal grating, thereby producing a spot beam, a vertical beam, and a cross beam; and a controlling element for controlling the different types of checking beams (Figs. 38-53 and Col 16, line 21-59, Col 17, line 45-Col 18, line 67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the beam splitter of Bijawat et al. to comprise a vertical grating and a

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horizontal grating which would create three different types of checking beams and to add an additional section control, as taught by Hara et al. since Hara et al. teaches using lenses and gratings to produce checking beams (Hara et al. Col 1, line 59-Col 2, line 17 and Col 16, line 21-59), creating a spot beam, a vertical beam and a cross beam and the control to move between all three types of beams, so that the refined laser level would be further useful in aligning objects or lines on a surface.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bijawat et al. and Hara et al. as applied to claims 1, 4-6, 8, 11 above, and further in view of Jehn (U. S. Patent No. 5,446,635).

Bijawat et al. and Hara et al. disclose the refined laser leveler as described above in paragraph 6.

Bijawat et al. and Hara et al. do not disclose the refined laser leveler wherein the fixed base comprises a light bulb mounted at said front end and a switch mounted at a side end for controlling said light bulb.

Jehn discloses a refined laser leveler wherein the fixed base comprises a light bulb (143) mounted at said front end and a switch mounted at a side end for controlling said light bulb (Col 2, lines 57-63 and Col 3, lines 44-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the refined laser leveler of Bijawat et al. and Hara et al. to include a light bulb, as taught by Jehn, so that a user would have a visual indication that the laser of the leveler was powered on.

Conclusion


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents disclose laser leveling devices Malard et al. (U. S. Patent No. 6,735,879), Goodrich et al. (U. S. Patent No. 6,502,319), Jan et al. (U. S. Patent No. 6,195,902), Dong (U. S. Patent No. 5,864,956), Ting (U. S. Patent No. 5,842,282), Louis (U. S. Patent No. 5,748,306), and Lee (U. S. Patent No. 5,367,779).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy R Cohen whose telephone number is (571) 272-2238. The examiner can normally be reached on 8 am - 5 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARC
September 15, 2004


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